

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Okamoto et al.

Serial No.: 10/568,616

Art Unit: 1765

Filed : February 16, 2006

Examiner : PENG, KUO LIANG

Title : CURING COMPOSITION WITH IMPROVED HEAT RESISTANCE

DECLARATION UNDER RULE 132

Honorable Commissioner of Patents and Trademarks,
Alexandria, VA 22313-1450

Sir:

I, Toshihiko OKAMOTO, hereby declare and state:
THAT I am a citizen of Japan;

THAT March 1994, I was graduated from the Graduate
school of OSAKA University, and received a Master Degree
in Engineering;

THAT I have been employed by Kaneka Corporation
since April 1994, and now I am a researcher of modified
silicone sealants;

I am an inventor of the invention disclosed in the
instant application;

I have read the Office Action mailed and the
references cited therein and am familiar with the subject
matter thereof;

I respectfully submit herewith my exact report
thereon;

In order to demonstrate the effect by a primary
amine as the component (C) in the curable composition of
the present invention, I have carried out the present

invention. For this purpose, I prepared two curable compositions. One is a curable composition containing a primary amine (diethylaminopropylamine), which falls within the pending claims, and the other is a curable composition containing a secondary amine (distearyl amine). I compared these two curable compositions in some properties, in particular, in curability and heat resistance, and found that the curable composition containing a primary amine showed rapider curability and higher heat resistance than the comparative composition containing a secondary amine.

[Experiment]

In the same manner as Table 2 (Example 5 to 7 and Comparative example 3) of the instant specification, curability of curable compositions (tack-free time: TFT), M50 value before heat curing (50% tensile stress), retention rate of M50 value after heat curing of 90°C x 14 days as listed in the below table. The results are illustrated in the Table below.

Table

Composition (Parts by weight)		Experiment No.	
		1	2
Component (A)	A-1	100	100
Filler	Hakukuka CCR	120	120
Titanium oxide	Tiqaue R-820	20	20
Plasticizer	DIDP	55	55
Tixotropic agent	Disparlon	2	2
Photostabilizer	Sanol LS-770	1	1
UV absorber	Tinuvin 327	1	1
Antioxidant	Irganox 1010	1	1
Dehydrating agent	A-171	2	2
Adhesion-imparting agent	A-1120	3	3
Tin carboxylate	Neostann U-50	5	5
Amine	Diethylaminopropylamine	1	
	Distearyl amine		4
Curability	Tack-free time min	10	20
M50 value before heat curing	MPa	0.43	0.43
Retention rate of M50 value after heat curing of 90°C x 14 days	%	91	83

[Results of the Experiments]

As illustrated in the Table above, the curable composition containing a primary amine (diethylaminopropylamine), which falls within scope of the pending claims, was excellent in rapider curability and higher heat resistance, compared with the curable composition containing a secondary amine (distearyl amine).

I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of

the application or any patent issued thereon.

Signed this 9th day of March, 2011

Toshihiko Okamoto
Toshihiko OKAMOTO